11

CLAIMS:

1.   An apparatus for compressing video signals for transmission, comprising:
          means (102) for generating a content controlled summary from input video
data;
          means (106) for synchronizing the content control summary with a continuous
5   audio signal;
          means (108) for encoding the summary along with the continuous audio for
transmission.

2.   The apparatus according to claim 1, further comprising:
10   means (1016) for transmitting the encoded signal.

3.   The apparatus according to claim 1, wherein the content-controlled summary
is created using key-frame detection.

15   4.   The apparatus according to claim 1, wherein the content controlled summary
means is controlled by a bit-rate control loop.

5.   The apparatus according to claim 1, wherein the content control summary and
the continuous audio signal are compressed into a substantially constant bit-rate stream.

20
6.   The apparatus according to claim 1, wherein time-stamps are inserted into the
synchronized signal to ensure proper decoding.

7.   A method for compressing video signals for transmission, comprising the steps
25   of:
          generating a content controlled summary from input video data;
          synchronizing the content control summary with continuous audio signal;
          encoding the summary along with the continuous audio for transmission.

12

8.   A computer storage medium having instructions stored therein for causing a computer to perform the method of claim 7.

9.   An interactive communication system for supplying information requested by a user, comprising:
            means (1004) for receiving an information request from the user;
            means (806) for searching a database for the requested information and extracting the requested information from the database;
            means (1010) for generating a content controlled summary of the extracted information;
            means (1012) for synchronizing the content control summary with continuous audio signal;
            means (1014) for encoding the summary along with the continuous audio for transmission.

10.   A method for supplying information requested by a user in an interactive communication system, comprising the steps of:
            receiving an information request from the user;
            searching a database for the requested information and extracting the requested information from the database;
generating a content controlled summary of the extracted information;
            synchronizing the content control summary with continuous audio signal;
            encoding the summary along with the continuous audio for transmission.

11.   A bitstream for carrying audio/video information in a communication system, comprising:
            an audio stream (403);
            a content video summary stream (405) created from key-frames of an input video signal, wherein said audio stream is synchronized with the video summary stream for broadcast.

12.   A storage medium comprising:
            an audio stream (403);

13

a content video summary stream (405) created from key-frames of an input video signal, wherein said audio stream is synchronized with the video summary stream for broadcast.

5   13.   A decoder for decoding a received information stream, comprising:
             means (902) for decoding a base stream in said information stream;
             means (904) for up-converting the decoded base stream;
             means (908) for decoding an enhancement stream in said information stream;
             means (906) for combining the upconverted base stream and the enhancement
10   stream, wherein the combined signal has still video images which are synchronized with an
     audio stream.

     14.   A method of decoding a received information stream, comprising:
             decoding (902) a base stream in said information stream;
15   up-conferting (904) the decoded base stream;
             decoding (908) an enhancement stream in said information stream;
             combining (906) the upconverted base stream and the enhancement stream,
     wherein the combined sginal has still video images which are synchronized with an audio
     stream.
20

     15.   A method of decoding a bitstream, the bistream carrying an audio stream and a
     content video summary stream created from key-frames of an input video signal, wherein
     said audio stream is synchronized with the video summary stream, wherein the method
     comprises:
25   decoding the audio stream,
                 decoding the video summary stream, and
                 reproducing the decoded audio stream and the decoded vido summary stream
     in a synchronized fashion as indicated by the bitstream.

30   16.   A device for decoding a bitstream, the bistream carrying an audio stream and a
     content video summary stream created from key-frames of an input video signal, wherein
     said audio stream is synchronized with the video summary stream, wherein the decoder
     comprises:
                 means for decoding the audio stream,

14

means for decoding the video summary stream, and

means for reproducing the decoded audio stream and the decoded vido

summary stream in a synchronized fashion as indicated by the bitstream.